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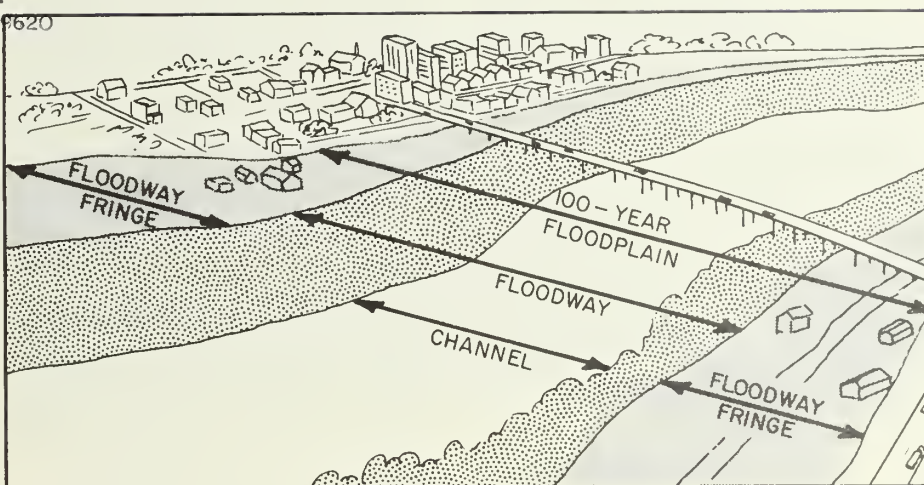
Defining the floodway and floodway fringe

There has been some reference in High Water lately to areas called the floodway and floodway fringe. We would like to define these areas for you.

The floodway and floodway fringe are actually two zones that make up the 100-year floodplain. The 100-year floodplain is the area adjoining a stream that would be covered by the waters of a 100-year flood. A 100-year flood has a one-percent chance of being equaled or exceeded in any given year. A 100-year flood has nearly a 23 percent chance of occurring in a 25-year period.

When a community has a Flood Insurance Study or another type of hydrologic and hydraulic floodplain study, the 100-year floodplain is divided into a floodway and a floodway fringe. Cross-sections of the stream are surveyed, then engineering methods incorporating stream discharge and other data are used to outline the two zones. Currently 64 communities in Montana have identified floodway and floodway fringe zones.

The **floodway** zone is a higher-hazard area that consists of the stream channel and its banks, and is the area considered necessary to carry floodwaters downstream. It is generally subject to faster water velocities and greater flood water depths. The **floodway** is a calculated area designed to pass flood flows from upstream to downstream areas with no more than a one-half-foot increase in flood heights.



The **floodway** is calculated with the assumption that at some time the remaining 100-year floodplain area outside the floodway would be completely developed, although this may never happen.

The **floodway fringe** zone is a lower-hazard area outside the floodway that would be inundated by a 100-year flood. It is subject to lower water depths and velocities. The **floodway fringe** is usually on the outer part of the floodplain.

Regulations also vary between the floodway and floodway fringe zones. Since the floodway is a higher-hazard area, with greater risk to life and property, a "prohibitive" approach is used. New structures for human habitation, commercial, or industrial uses are prohibited. Other non-essential uses that obstruct floodwaters in the floodway, such as fill, are also prohibited. Necessary new uses such as roads,

transmission lines, stream crossings, excavation, storage, etc. are allowed but must be constructed to minimize the amount of obstruction to floodwaters. Uses with a low damage potential, such as agriculture, recreation, forestry, and other open space uses are allowed without regulation.

The floodway fringe has a lower-hazard potential so a "performance standards" approach is used. The performance standards allow most types of development in the floodway fringe; however, new structures must be protected by elevating or flood-proofing. Using these two approaches to floodplain regulations makes the standards easier to administer. Since the floodway area is already calculated, an engineering study does not have to be done every time development takes place. Leaving the floodway free of obstructions assures flood heights won't be increased.

Fielding questions about the new floodplain ordinance

By now communities with designated base flood elevations have had a chance to review the new model floodplain ordinance. Your communities may have some tough questions to ask regarding the new ordinance. The new regulation changes have the biggest effect on communities with existing mobile home parks or subdivisions in the 100-year floodplain. Many of the same issues will arise for every community. Listed below are some of the questions and answers that may make the choices easier for your community. It may also be helpful information to have when you hold your public hearing on the proposed ordinance. Some of the following material is adapted from Floodplain Regulations and the Courts 1970-1981, Jon A. Kusler, 1982.

Q. If we don't allow mobile homes to be replaced in existing trailer parks and subdivisions in the floodway as the new ordinance specifies, is this an illegal taking of property rights?

A. "Without exception, courts held that prevention of nuisances on private lands did not violate property rights and was not a taking. Regulations controlling uses that would be "nuisance like" in causing damage to adjacent lands or threatening public safety do not violate property rights because land-owners have no right to create nuisances. Many cases upheld floodway and other regulations designed to prevent such damaging effects even when those regulations prohibited all or most economic use of lands."

Q. Does the government have to compensate landowners for any economic effects of floodplain regulations?

A. "Courts have usually held that natural conveyance of flood flows, flood storage, erosion control, and other passive flood hazard reduction functions are not public uses of private land that require compensation. As one court in a floodplain case noted, the state has not placed the appellant's land in the path of floods, nature has."

Q. Do the floodway and the floodway fringe designations and regulations devalue property in those areas?

A. People have always liked to live near water for its aesthetic value; because of this, the value of property may be set too high. The flood hazard, however, has always been present, regardless of whether or not there is a floodplain map and ordinance. Perhaps the area should not have been appraised as residential property in the first place. If the costs of flood damages and risks to life were figured in to the land value, a truer appraisal would be obtained.

Q. Is this ordinance fair to the mobile home park and subdivision owners?

A. The ordinance may not seem fair to these people. However, when there is a flood, the whole community must help pay for the repairs to streets, sidewalks, bridges, culverts, sewer and water lines, plus the costs of warning and evacuating people during a flood. The State of Michigan estimated that through floodplain regulations they avoided 70% of the damage that would have occurred without regulations. Taxpayers throughout the state and nation also pay for flood damages through disaster assistance programs.

Q. How does the floodplain administrator find out about trailers being moved in and out of mobile home parks?

A. Manufactured (mobile) home parks are licensed by the Food and Consumer Safety Bureau of the State Department of Health and Environmental Sciences. Periodic inspections are performed by County Sanitarians as a licensing requirement. The inspections can be used as a means to review compliance with the standards. Owners of mobile home parks in a floodplain should be informed about the new standards before the new ordinance is adopted.

Q. Why did the government change the flood insurance program rules?

A. Public disaster assistance to repair and replace flood-damaged mobile homes has increased dramatically. The federal government feels that the new regulations will decrease the costs of disaster assistance. They think it is a fair compromise for continued availability of federally subsidized flood insurance and disaster assistance.

Q. When does the Federal Emergency Management Agency (FEMA) want the ordinances updated?

A. FEMA wants the ordinances in place by April 1, 1987.

Q. What happens if a community does not have an up-to-date floodplain ordinance?

A. It could affect the community's good standing in the National Flood Insurance Program. As a condition of participating in the flood insurance program, a community must have an up-to-date working ordinance. The Federal Emergency Management Agency retains the right to place a community on probation if it has a non-compliant floodplain ordinance. The immediate effect of such probation is a \$25 surcharge on all new and renewal flood insurance policies written in the community.

Q. What if we, as a community, choose to repeal our local ordinance and drop out of the flood insurance program entirely?

A. Non-participation or suspension from the program places the following sanctions on the community.

1. No flood insurance policies for properties in or out of the floodplain shall be sold or renewed anywhere in the community.
2. Without flood insurance you cannot get grants, loans, or guarantees made by federal agencies for purchase of property, construction, or improvements in the floodplain. This applies to Small Business Administration, Federal Housing Administration, Veterans Administration, and other federal loans. Many conventional loans also require flood insurance because of federal guarantees through the secondary mortgage market.
3. If a flood disaster situation occurs, the residents will not receive federal disaster funds to relocate outside the floodplain or repair damaged property. Individual and Family Grant assistance for housing and personal property will not be available. The whole community suffers from the loss of flood insurance and disaster assistance. Dropping out of the flood insurance program can pose a liability to the community.

What to do when floodwaters are rising — a workshop

With a dry winter this year few people are expecting spring flooding, but devastation occurs precisely because floods are unpredictable and unexpected. To help prepare for the unexpected flood, a series of workshops on flood loss reduction are being offered throughout the state. The main feature of the workshops is a hands-on demonstration of emergency sandbagging by the Corps of Engineers. Also included in the workshops will be a presentation on flood forecasting by the National Weather Service and a discussion on reducing future flood losses through local floodplain management presented by the Floodplain Management Section.

The half-day workshops will be held in April and May this year. Most will be held in conjunction with the Disaster and Emergency Services annual district meetings. We will keep you posted on meeting dates and locations.



Photo by Larry Mayer, Billings Gazette

Two out-of-state workshops this summer

Flash Flood Mitigation — Rapid City and Floodplains '87 — Seattle

Flash Flood Mitigation: Breaking the cycle of flash flooding 15 years after the Rapid City flood, Rapid City, South Dakota June 9-10, 1987. The recovery efforts of Rapid City after the destructive 1972 flash flood stands as a model of successful floodplain management in reducing future flash flood risks.

Rapid City wishes to share what they have learned as well as present new ideas for flash flood planning. Some of the topics include financing flash flood hazards through pre-disaster planning, and reducing the risk of liability for floodplain management decisions. The conference fee is \$50, which includes two luncheons and a guided bus tour of the Rapid City greenbelt and floodplain. For more information and registration contact:

Federal Emergency Management Agency
Attn: Jan McCulloh
Disaster Assistance Program Division
Box 25267
Denver, CO 80225-0267
(303) 235-4858

Floodplains '87: Realistic Approaches to Better Management — the annual conference of the Association of State Flood Plain Managers in Seattle, Washington June 10-12, 1987. The goal of this national organization is the reduction of flood hazards through sound floodplain management. This year's conference emphasizes how local administrations can best manage floodplains with minimal

data, how to instill local governments with a greater sense of responsibility for floodplain management, how to manage stormwater flooding and urban drainage problems, and how to make floodplain residents more aware of flood hazards. The conference will feature one block of sessions dealing specifically with western states' flood damage reduction problems. Registration before May 1, 1987 is \$150 for members and \$165 for non-members: a field trip and meals are included. For more information and registration contact:

Ed Hammersmith
ASFPM Conference Director
Department of Ecology
PV Mail Stop II
Olympia, WA 98504
(206) 459-6793

Survey identified floodplain assistance needs

Last November a community assistance questionnaire was sent out to Montana's local floodplain administrators. These questionnaires were part of a national effort by the Association of State Flood Plain Managers to survey the type of assistance communities need for their floodplain management programs. In Montana approximately 100 questionnaires were sent out and 47 were returned—an excellent response.

The results show several communities need outside help to identify floodways and flood elevations in unstudied areas, revise floodplain maps, obtain stormwater management information, identify unique hazards, and obtain floodplain maps. Outside assistance is also necessary for several communities on national

flood insurance program banking and lending rules and on flood insurance coverage and claims. A majority of the communities found outside assistance important or useful for public information on flood programs, understanding the national flood insurance program regulations, learning flood-proofing techniques, pursuing and correcting violations, and understanding state building and zoning laws.

Montana's results are similar to those collected from the 15 other states surveyed. The Association will use these results to work with the federal government to identify ways these high priority needs can be met. We are grateful for your responses.

Hingham joins the flood insurance program

The Town of Hingham along Montana's Hi-Line has joined the National Flood Insurance Program. This brings the total of participating communities to 102. Congratulations to the people of Hingham for making this wise step. We hope more people will be protected against future flooding.

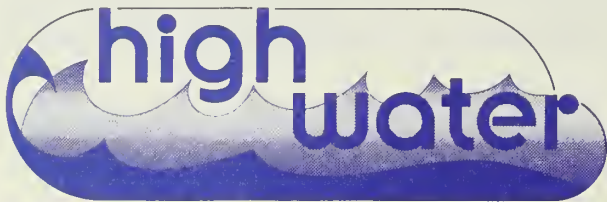
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